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10/814,364

03/31/2004

Michael Kenoyer

199-0042US-C2

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06/13/2006

WONG, CABELLO, LUTSCH, RUTHERFORD & BRUCCULERI,
L.L.P.

20333 SH 249

SUITE 600

HOUSTON, TX 77070

EXAMINER

RAMAKRISHNAIAH, MELUR

ART UNIT

PAPER NUMBER

2614

DATE MAILED: 06/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|----------------------|----------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/814,364 | KENOYER ET AL. | |
| | Examiner | Art Unit | |
| | Melur Ramakrishnaiah | 2614 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-31, 33 and 35-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-31, 33 and 35-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>3-31-04, 5-24-04, 9-17-04, 12-13-04</u> | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 23, 29, 31, 33, 35-37, 38, 42, 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Addeo (US PAT: 5,335,011) in view of Nakamura (JP10-042264).

Regarding claim 23, Addeo discloses a local videoconferencing device for videoconferencing having a local videoconferencing device with a video display and a remote videoconferencing device with a video display interconnected through the network, the local videoconferencing device comprising: a processing unit (160, fig. 2) coupled to the videoconferencing system, a communication interface (115, fig. 2) coupled to the processing unit and other remote videoconferencing devices through the network, wherein the processing unit is operative to produce at least one of a first video stream from the signals received from the video sensor (not shown) and an audio stream and audio source position signal from signals received from the microphones, wherein the processing unit is operative to receive at least one video stream, one audio stream (col. 3 lines 26-54; col. 4, line 24 – col. 6, line 4).

Addeo differs from claim 23 in that he does not teach the following: a videoconferencing device bar, wherein videoconferencing bar comprises a video sensor for capturing images, a plurality of microphones for capturing sound, and a plurality of

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speakers for producing sound , wherein video sensors, the microphones and speakers are arranged in fixed positions in the videoconferencing bar.

However, Nakamura discloses video conferencing system which teaches the following: a videoconferencing device bar, wherein videoconferencing bar comprises a video sensor (2, Drawings: 1, 3) for capturing images, a plurality of microphones (3/4, Drawings: 1, 3) for capturing sound, and a plurality of speakers (3/4, Drawings: 1, 3) for producing sound (paragraph: 0009, 0015, 0036), wherein video sensors, the microphones and speakers are arranged in fixed positions in the videoconferencing bar (Drawing: 3).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Addeo's system to provide for the following: a videoconferencing device bar, wherein videoconferencing bar comprises a video sensor for capturing images, a plurality of microphones for capturing sound, and a plurality of speakers (for producing sound , wherein video sensors, the microphones and speakers are arranged in fixed positions in the videoconferencing bar as this arrangement would provide compact arrangement for accommodating video conferencing peripherals such as camera, microphones, and speakers etc as shown by Nakamura.

Regarding claim 38, Addeo discloses a method for videoconferencing, wherein plurality of videoconferencing devices are connected through a network, a processing unit, a video display and a network interface, the method comprising: capturing video images with the video sensor (not shown) in the videoconferencing system, capturing audio signals with microphones in the videoconferencing system, receiving video

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images and audio signals at the processing unit (160, fig. 2), generating first video stream from the video images and an audio stream and an audio position signal from the audio signals, transmitting audio stream and video stream to a remote conferencing device, displaying the first video stream on a video display at the remote conferencing device (col. 3 lines 26-54; col. 4, line 24 – col. 6, line 4).

Addeo differs from claim 38 in that he does not teach the following:

videoconferencing device comprises a videoconferencing bar having a video sensor, a plurality of microphones and speakers.

However, Nakamura discloses video conferencing system which teaches the following: videoconferencing device comprises a videoconferencing bar (Drawing 3) having a video sensor (2, Drawing 3), a plurality of microphones and speakers (3/4, Drawing 3, paragraph: 0036).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Addeo's system to provide for the following: videoconferencing device comprises a videoconferencing bar having a video sensor, a plurality of microphones and speakers as this arrangement would provide compact arrangement for accommodating video conferencing peripherals such as camera, microphones, and speakers etc as shown by Nakamura.

Regarding claims 31, 44, Addeo teaches the following: processing unit (140, fig. 2) is operative to drive the plurality of speakers to reproduce sound according to the received audio signal and audio source position signal by selectively driving one or more speakers in response to received position signal from the videoconferencing

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device to play the audio signal corresponding to the image of the at least one video stream (fig. 2 col. 5 lines 23-39, col. 5, line 66 – col. 7, line 4).

Addeo differs from claims 29, 33, 35-37, 42 in that he does not teach the following: processing unit is operative to generate the position signal based on magnitude difference of the audio signals received from the plurality of microphones, wherein videoconferencing bar is horizontal and operable to be placed on top of a video display, video sensor has a wide viewing angle, viewing angle is 65 degrees, further comprising a pan motor to increase the viewing angle of the video sensor.

However, Nakamura teaches the following: processing unit (1/5, Drawing 1) is operative to generate the position signal based on magnitude difference of the audio signals received from the plurality of microphones (3/4, Drawings: 1, 3, paragraphs: 0022-0023), wherein videoconferencing bar is horizontal and operable to be placed on top of a video display (paragraph: 0009 Drawings: 1, 3), video sensor (2, Drawings: 1, 3) has a wide viewing angle, viewing angle is 65 degrees, further comprising a pan motor to increase the viewing angle of the video sensor (claims 6-7).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Addeo's system to provide for the following: processing unit is operative to generate the position signal based on magnitude difference of the audio signals received from the plurality of microphones as this arrangement would provide one of methods, among many possible methods, for determining the position of the speaker in a video conference as taught by Nakamura, wherein videoconferencing bar is horizontal and operable to be placed on top of a video display as this

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arrangement would provide compact arrangement for accommodating video conferencing peripherals such as camera, microphones, and speakers etc as shown by Nakamura, video sensor has a wide viewing angle, viewing angle is 65 degrees, further comprising a pan motor to increase the viewing angle of the video sensor as this arrangement would provide for directing the camera to capture the desired conferee in a conference as is well known in the art.

3. Claims 24-28, 39-41, are rejected under 35 U.S.C. 103(a) as being unpatentable over Addeo in view of Nakamura as applied to claims 23 and 38 above, and further in view of Westfield.

Regarding claims 24-27, 39-41, the combination does not teach the following: video sensor is operative to produce high resolution video stream, wherein first video stream is of a first resolution, wherein processing unit is operative to produce a second video stream, and wherein second video stream is of a second resolution and is representing an area in the first video stream, wherein the first resolution of first video stream is 700x400 pixels, and wherein second resolution of the second video stream is 300x200 pixels, wherein the maximum resolution of the video sensor is 3000x2000 pixels, wherein the second video stream represents the images of a speaking videoconference participant.

However, Westfield teaches the following: video sensor is operative to produce high resolution video stream, wherein first video stream is of a first resolution, wherein processing unit is operative a second video stream, and wherein second video stream is of a second resolution and is representing an area in the first video stream, wherein the

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first resolution first video stream is 2048x1526 pixels, and wherein second resolution of the second video stream is 640x480 pixels, wherein the maximum resolution of the video sensor is 2048x1526 pixels (col. 4 lines 52-59), wherein the second video stream represents the images of a speaking videoconference participant (col. 5, line 24 – col. 6, line 33).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify the combination to provide for the following: the combination does not teach the following: video sensor is operative to produce high resolution video stream, wherein first video stream is of a first resolution, wherein processing unit is operative to produce a second video stream, and wherein second video stream is of a second resolution and is representing an area in the first video stream, wherein the first resolution of first video stream is 700x400 pixels, and wherein second resolution of the second video stream is 300x200 pixels, wherein the maximum resolution of the video sensor is 3000x2000 pixels, wherein the second video stream represents the images of a speaking videoconference participant as this arrangement would provide necessary processing to meet the application requirements for intended use as shown by Westfield.

Regarding claim 28, the combination teaches the following: second video stream follows the speaking videoconference participant and changes when the speaking videoconference participant changes (paragraphs: 0028 – 0035 of Nakamura)

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Claims 24-28, 39-41, are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura in view of Addeo as applied to claims 23 and 38 above, and further in view of Westfield.

4. Claims 30 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Addeo in view of Nakamura as applied to claims 23 and 38 above, and further in view of Simms, Jr. (US PAT: 3,618,035, hereinafter Simms).

Regarding claims 30 and 43, the combination does not teach the following: processing unit is operative to synchronize the phases of the signals from the video sensor and a video stream output by a remote videoconference device for display on a remote video display.

However, Simms teaches the following: a method of synchronizing the phase of the video signals transmitted to video display apparatus (claim 11).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify the combination to provide for the following: processing unit is operative to synchronize the phases of the signals from the video sensor and a video stream output by a remote videoconference device for display on a remote video display as this arrangement would facilitate displaying received signals properly.

Response to Arguments

Regarding rejection of claims under 35 U.S.C 103(a) as being obvious over Nakamura (JP10-042264) in view of Addeo (US PAT: 5,335,011): Applications arguments regarding combination of Nakamura and Addeo are noted. In view of this rejection of claims is revised using the same references using a different combination of

references which would overcome applicant's arguments regarding improper combination for the following reasons: Addeo discloses video conferencing arrangement with a processing system which receives audio source position signal from a video conferencing device (fig. 2, col. 5 lines 23-29, col. 5, line 66 – col. 7, line 6) and Nakamura teaches a video conferencing bar with camera, microphones and speakers located therein providing a compact arrangement. The combination of Addeo and Nakamura is combined to provide a compact video conferencing arrangement as set forth in the rejection of claims in the office action above.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

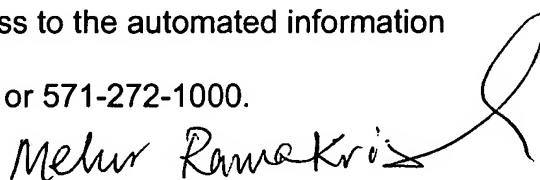
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melur Ramakrishnaiah whose telephone number is (571)272-8098. The examiner can normally be reached on 9 Hr schedule.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curt Kuntz can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Melur Ramakrishnaiah
Primary Examiner
Art Unit 2614